VERY DISTINCTIVE NEW ALOE FROM MOCAMBIQUE.

(With Plate 26.)

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In the present paper a very distinctive and unique new *Aloe* from Mocambique is described.

Aloe suffulta, Reynolds. Species nova et distinctissima sectione Saponariarum. Planta succulenta, nec sobolifera nec caespitosa, breviter caulescens. Folia circiter 16, laxe rosulata, basi 4 cm. lata, longe attenuata et saepe 40-50 cm. longa, patentia et recurvula; supra canaliculata viridia, copiose albo-maculata; subtus convexa, maculata; ad margines dentibus uncinatis albis 1-2 mm. longis, 5—10 mm. distantibus instructa. In corescentia una, suffulta, usque ad 2 met. alta; scapus insigniter gracilis, supra medium 6-9 ramosus. Racemi cylindrico-acuminati, terminales circiter 15 cm. longi, laxe 15-20 floribus. Bracteae sub-scariosae albidae 7-nervatae, pedicellis aequantes. Pedicelli 9 mm. longi. Perigonium 30-35 mm. longum, cylindricotrigonum, basi 6 mm. diam. haud inflatum, supra ovarium levissime constrictum (5.5 mm, diam.) faucem versus levissime ampliatum. Segmenta exteriora per 7 mm. libera, obscure 5-nervata, apice recurvula; interiora latiera obtusiora. Genitalia 6 mm. exserta. Ovarium 6 mm. longum, 2.5 mm. diam.

Hab. Mocambique: Under bushes near Vila Luiza (Marracuene), about 19 miles north of Lourenco Marques, alt. 300 ft., fl. 13 June, 1937, Reynolds 2457! (type) in National Herbarium, Pretoria; and in Bolus Herb., Kirstenbosch. Plants No. 2811.6.37 in Garden of Botanical Section, Div. of Plant Industry, Pretoria, and No. 862/37 in National Botanic Gardens, Kirstenbosch. (Plate 26.)

This very distinctive new Aloe was brought to my notice by Mr. C. Foster, of Krugersdorp, who collected specimens at Marracuene about two years ago. A plant kindly donated by Mr. Foster has been in cultivation in Johannesburg, but has not yet flowered. On 13 June, 1937, I made a special journey to Mocambique for the express purpose of investigating this species, and was most fortunate to find many plants in full bloom. The species is found in fairly large numbers on the west

bank of the Incomati River about one mile south of Vila Luiza (also known as Marracuene), which is about 19 miles north of Lourenco Marques at an elevation of 300 ft. Plants are found under bushes in shady protected positions, growing in almost pure white sand covered with leaf mould and humus, and are so loosely in the ground that they can be removed by hand with scarcely any resistance.

Although very distinctive in rosette and leaf, the most striking feature of the species is that the inflorescence works its way up through bushes and is supported by them. This character appears to be unique in Aloe and suggests the specific epithet. The rosettes are on the ground, only the inflorescence being supported by bushes, which is very different from the scandent growth of A. ciliaris Haw., in which stems, rosettes and inflorescences are all supported by bushes and trees. In A. suffulta the usual height of the inflorescence is about 5 feet (Fig. 1), although one specimen was noticed with an inflorescence 7 feet high. (Fig. 2.) In all cases the peduncles were exceedingly slender, being only 7—9 mm. diam., and totally unable to support the weight of their inflorescences. It will be interesting to observe whether plants cultivated away from bushes will develop stouter peduncles capable of supporting their inflorescences.

The leaves are sheathed at base somewhat similar to A. striatula Haw., and are green, spotted throughout on both surfaces, deeply channelled and gracefully recurved, usually 40—50 cm. long, although a length of 75 cm. is sometimes reached in the most robust forms. In protected positions the marginal teeth interspaces are the green colour of the leaf, but in more exposed positions the leaves are more reddish-brown, with the interspaces joined by a very narrow sub-cartilaginous whitish line.

A noteworthy character of the branching of the inflorescence is that the raceme is usually about as long as the branch below it, *i.e.* total length of branch and raceme about 16 cm., of which the raceme is 8 cm. long, with the branches obliquely disposed, and the open flowers almost pendulous.

The flowers are of a pale reddish colour turning whitish at mouth, with the genitals exserted 6—8 mm.; there is no basal swelling whatever, and only the slightest narrowing above the ovary. In this respect they somewhat resemble A. grandidentata Salm Dyck, but are considerably less clavate and have a much wider open mouth.

It seems that A. suffulta should be referred to the Saponariae, although it is not closely allied to any species in that section, and is distinguished by the channelled recurved leaves, and especially by the inflorescence being entirely supported by bushes.

Fig. 4.



Fig. 3.

Plate 26. Aloe suffulta, Reynolds.

Fig. 2.

Fig. 1. Illustrating a very typical plant, inflorescence 5 ft.
Fig. 2. Plant with 7 ft. inflorescence, which in natural habitat is supported by bushes.
Note.—For clearer detail, plants are illustrated away from their natural habitat; fl. 13 June, 1937, near V.la Luiza (Marracuene) Mocambique.

Fig. 3. Upper portion of inflorescence, $\times \frac{1}{8}$ approx. Note pendulous open flowers.

Fig. 4. Flowers 1/1, from bud to post-pollination stage.

Fig. 1.

A species to be considered, and one about which very little appears to be known, is A. Monteiroi Bak., from Delagoa Bay. Berger (in Das P#anzenreich, Liliac.-Asphod.-Aloin. 1908, p. 263) records this species from "Sofala Gaza-Land," and places it, together with A. Cameronii Hemsl., in the section Monostachyae, but Baker, in his original description (Gard. Chron. VI. 1889, p. 523) states "... it comes nearest to A. obscura Miller (A. picta Thunb.)," which is a very different species from A. Cameronii. The figures of A. picta (now in synonymy under A. obscura Mill.) in Salm. Monogr. 1836—63, sect. 23, fig. 2, and in Bot. Mag. 1910, t. 1323, illustrate a plant near A. saponaria (Ait.) Haw. in leaf and flowers, but differing with longer conical racemes. It therefore seems that Berger was mistaken in allying A. Monteiroi to A. Cameronii, and that we should rely only on Baker's account.

It has been suggested that the Vila Luiza (Marracuene) species should be referred to A. Monteiroi, but from the description the latter is quite a different plant. Baker describes A. Monteiroi inter alia with "Peduncle simple above $1\frac{1}{2}$ ft. long, raceme moderately dense perianth cylindrical an inch long, dull red tinged with green, tube constricted above the ovary, segments oblong $\frac{1}{2}$ inch long, stamens and style considerably exserted. . . ."

In A. suffulta the peduncle is 5—9-branched, the inflorescence 5—7 ft. high, racemes laxly flowered, perianth 34 mm. long, not tinged with green, tube very slightly narrowed near the middle, segments free for 7 mm. only, and genitals exserted 6—8 mm.

Baker's species was described from a plant when it flowered for the first time at Kew, and as so often happens, the type described might not be typical of the species as found in its natural habitat. After allowing for this possibility, there are still too many points of difference for the Vila Luiza plants to belong to A. Monteiroi and they are therefore accorded distinct specific rank.

Photographs taken of A. suffulta in its natural surroundings in bush do not show the inflorescence clearly, therefore, for purposes of illustration, two plants are figured away from their natural habitat, which gives a better idea of the very slender peduncles, and the height and branching of the inflorescences.

Description.—Plant succulent, solitary under bushes, not suckering nor forming groups. Stem 10—20 cm. long, 15—20 mm. diam., foliate from ground level, with internodes 5—10mm. distant. Leaves about 16, sheathing at base, the sheathing portion striatulate, not auriculate, 4 cm. broad at base, gradually attenuate, mostly 40—50 cm. long. spreading and gracefully recurved; upper surface usually deeply canaliculate, green

with dull white spots throughout, the spots about 5 mm. long, 2 mm. broad, sometimes irregularly scattered, usually more or less arranged in a series of interrupted undulating transverse bands; lower surface convex, duller green, spotted throughout, the spots usually larger, more confluent, and in broader less undulating bands; margins armed with whitish teeth 1-2 mm. long, 5-10 mm, distant, smaller and more crowded near base, gradually slightly larger and more distant upwards, usually hooked forward. Inflorescence one only, a branched panicle, usually about 1.75 met. high, supported by bushes. Peduncle exceedingly slender, about 8 mm. diam., branched well above the middle with up to 9 short branches, the peduncle and branches below racemes not sterile bracteate, lowest branch subtended at base by a thin, scarious, whitish, many-nerved bract up to 20 mm. long, 13 mm. broad at base. Racemes cylindric, slightly acuminate, the terminal about 15 cm. long, 5 cm. diam., laxly about 15-20-flowered, the buds rather horizontally disposed, not congested at apex, lateral racemes about 8 cm. long, with fewer flowers; the buds grevish-green striped in upper quarter, the flowers nearest Light Jasper Red (R.C.S. XIII) turning whitish at mouth. Bracts amplexicaul, thin, sub-scarious, whitish, about 7-nerved, as long as their pedicels. Pedicels lowest of terminal racemes 9 mm. long, slightly shorter in lateral racemes. Perianth 30-35 mm. long, very slightly stipitate at base, cylindric-trigonous, slightly curved, 6 mm. diam. near base, very slightly narrowing above the ovary (5.5 mm. diam.), thence enlarging towards the throat and forming a very wide open mouth. Outer segments free for 7 mm. from apex, the free portion with 5 congested dull brownish nerves confluent at apex, with a 1.5 mm. broad white border, and sub-acute spreading to recurved apices. Inner segments broader than the outer, with broader white border, and more obtuse spreading apices, dorsally adnate to the outer for their greater length. Filaments very pale rose-coloured, flattened, the 3 inner narrower and lengthening in advance of the 3 outer. Anthers exserted 6 mm. Stigma at length exserted 8 mm. Ovary 6 mm. long, 2.5 mm. diam., green, paler green at the 3 broadest angles giving a rather broad-striped effect.